CLAIMS

What is claimed is:

1   1.   A method for closing a communications stream between a first terminal

2   and a second terminal in a communications system, the communications stream having

3   repeating time slots in a time division channel comprising:

4   sending a closing message in a first slot from the first terminal to the second

5   terminal to request that the communications stream be closed;

6   listening to the communications stream at the first terminal to determine whether

7   any messages are sent from the second terminal to the first terminal in a slot after the first

8   slot; and

9   closing the stream, if no further messages are received from the second terminal.

1   2.   The method of Claim 1, wherein the repeating time slots comprise a set of

2   repeating slots for the second terminal and wherein closing the stream comprises closing

3   the stream if no further messages are received in the next slot for the second terminal

4   after sending the closing message.

1   3.   The method of Claim 1, wherein the communications stream comprises a

2   data traffic channel and wherein sending a closing message comprises sending a closing

3   message in the data traffic channel.

1   4.   The method of Claim 1, wherein closing the stream comprises sending a

2   further closing message in a second slot from the first terminal to the second terminal, if a

3   further message is received from the second terminal.

1   5.   The method of Claim 1, further comprising checking a transmit buffer in

2   the first terminal and wherein sending a closing message is performed in response to an

3   absence of data in the buffer.

1   6.   The method of Claim 1, wherein sending a closing message is performed

2   in response to an absence of data in a transmit buffer for more than a determined amount

3   of time.

1   7.   The method of Claim 1 wherein the determined amount of time is selected

2   to be greater than the amount of time required to close the communications stream and

3   then open a new communications stream.

1   8.   The method of Claim 1, wherein listening to the communications stream

2   comprises listening at the first terminal in a sequence of slots after the first slot, the

3   number of slots in the sequence being determined by the possibility of being able to

4   distinguish a message from the second terminal from noise in the channel.

1   9.   The method of Claim 8 wherein the number of slots in the sequence is

2   determined by a class of modulation being used for the stream.

1   10.   A machine-readable medium having stored thereon data representing

2   sequences of instructions which, when executed by a machine, cause the machine to

3   perform operations comprising:

4   sending a closing message in a first slot of a communications stream from the first

5   terminal to the second terminal to request that the communications stream be closed the

6   stream having repeating time slots in a time division channel;

7   listening to the communications stream at the first terminal to determine whether

8   any messages are sent from the second terminal to the first terminal in a slot after the first

9   slot; and

10   closing the stream, if no further messages are received from the second terminal.

1   11.   The medium of Claim 10, wherein the repeating time slots comprise a set

2   of repeating slots for the second terminal and wherein the instructions for closing the

3   stream comprise further instructions which, when executed by the machine, cause the

4   machine to perform further operations comprising closing the stream if no further

5   messages are received in the next slot for the second terminal after sending the closing

6   message.

1   12.   The medium of Claim 10, wherein the instructions comprise further

2   instructions which, when executed by the machine, cause the machine to perform further

3   operations comprising checking a transmit buffer in the first terminal and wherein the

4   instructions for sending a closing message are performed in response to an absence of

5   data in the buffer.

1   13.   The medium of Claim 10, wherein the instructions for sending a closing

2   message are performed in response to an absence of data in a transmit buffer for more

3   than a determined amount of time.

1   14.   A method of determining to close a communications stream between a

2   first terminal and a second terminal in a communications system comprising:

3   checking a transmit buffer for data to transmit in the stream;

4   waiting for a determined amount of time;

5   rechecking the transmit buffer; and

6   determining to close the communications stream, if there is no data in the transmit

7   buffer to transmit after the checking and the rechecking.

1   15.   The method of Claim 14, wherein the determined amount of time is

2   selected to be greater than the amount of time required to close the communications

3   stream and then open a new communications stream.

1   16.   The method of Claim 14, further comprising:

2   determining whether previously transmitted data included a data boundary value;

3   comparing the boundary value to the data previously transmitted; and

4   if the data boundary value is satisfied then determining to close the

5   communications stream.

1   17.   The method of Claim 16, wherein the data boundary value indicates the

2   size of a data packet to be transmitted.

1   18.   The method of Claim 16, wherein the data boundary value indicates

2   streaming data with no predetermined endpoint.

1   19.   The method of Claim 16, wherein the data boundary value indicates a

2   diagnostic sequence.

1   20.   The method of Claim 14, further comprising:

2   checking a higher layer protocol to determine whether all data units to be

3   transmitted have been received; and

4   determining to close the communications stream, if all of the data units to be

5   transmitted have been received and there is no data in the data buffer after the checking

6   and rechecking.

1   21.   A machine-readable medium having stored thereon data representing

2   sequences of instructions which, when executed by a machine, cause the machine to

3   perform operations comprising:

4   checking a transmit buffer a first terminal for data to transmit in a

5   communications stream;

6   waiting for a determined amount of time;

7   rechecking the transmit buffer; and

8   determining to close the communications stream, if there is no data in the transmit

9   buffer to transmit after the checking and the rechecking.

1   22.   The medium of Claim 21, further comprising instructions which, when

2   executed by the machine, cause the machine to perform further operations comprising:

3   determining whether previously transmitted data included a data boundary value;

4   comparing the boundary value to the data previously transmitted; and

5   if the data boundary value is satisfied then determining to close the

6   communications stream.

1   23.   The medium of Claim 22, wherein the data boundary value indicates the

2   size of a data packet to be transmitted.

1   24.   The medium of Claim 21, further comprising instructions which, when

2   executed by the machine, cause the machine to perform further operations comprising:

3   checking a higher layer protocol to determine whether all data units to be

4   transmitted have been received; and

5   determining to close the communications stream, if all of the data units to be

6   transmitted have been received and there is no data in the data buffer after the checking

7   and rechecking.